

## **REMARKS**

### **SUMMARY**

Reconsideration of the application is respectfully requested. Claims 1-16 stand rejected. Claims 17-39 have been added by this paper. Claims 1-16 have been canceled by this paper. No new matter is added.

### **CLAIM OBJECTIONS**

In "Claim Objections" on page 2 of the above-identified Office Action, the Examiner objected to claim 1 because of an informality. Claim 1 has been canceled which renders the objection moot and consideration of new claims 17 – 39 is respectfully requested.

### **CLAIM REJECTIONS UNDER 35 U.S.C. § 102**

In "Claim Rejections-35 USC § 102" on pages 2-6 of the above-identified Office Action, claims 1-4, 6, 8-14 and 16 were rejected under 35 USC § 102 (b) as being anticipated by U.S. Patent No. 5,933,146 to Wrigley (hereinafter "Wrigley").

Notwithstanding Applicants respectfully disagree with above reading by the Examiner, claims 1-4, 6, 8-14 and 16 have been canceled, rendering their rejections moot. In order to clarify the claimed subject matter, new claims 17 -39 have been added. These claims add no new subject matter to the application and claim subject matter in the original claims, falling within the subject matter included in the Examiner's original search.

Wrigley does not teach "preventing, by the computing device, the object from being intersected more than once by the ray," as recited by new independent claims 17, 24, 32 and 39. Indeed, in the above-cited office action, the Examiner cited no finding in Wrigley to correspond to this element.

Accordingly, Applicants submit that new independent claims 17, 24, 32 and 39 distinguishes over Wrigley and are therefore not anticipated by Wrigley under 35 USC §102(b) and allowance of claims 17, 24, 32 and 39 is respectfully requested.

Claims 18-23, 25-31 and 33-38 depend from new claims 17, 24 and 32, respectively, incorporating their recitations. Therefore, for at least similar reasons set forth for the corresponding independent claims, Applicants submit that these dependent claims are not anticipated by Wrigley under 35 USC §102 (b) and allowance of claims 18-23, 25-31 and 33-38 is respectfully requested.

#### **CLAIM REJECTIONS UNDER 35 U.S.C. § 103**

In “Claim Rejections-35 USC § 103” on pages 7-9 of the above-identified Office Action, claim 5 was rejected under 35 USC § 103 (a) as being unpatentable over Wrigley in view of U.S. Patent No. 6,597,359 to Lathrop (hereinafter “Lathrop”), claim 7 was rejected under 35 USC § 103 (a) as being unpatentable over Wrigley singly and claim 15 was rejected under 35 USC § 103 (a) as being unpatentable over Wrigley in view of U.S. Patent Publication No. 2003/0160788 to Buehler (hereinafter “Buehler”).

Claims 5, 7 and 9 have been canceled, rendering their rejections moot. Further, neither Lathrop, nor Buehler teach or suggest “preventing, by the computing device, the object from being intersected more than once by the ray,” which is not anticipated by Wrigley. Nor would it have been obvious to modify Wrigley to incorporate such an element, since Wrigley teaches away from preventing a ray from intersecting an object again, if the objects have already been intersected by a ray, by teaching that all intersections are computed and, only then, can nearer surface intersections be determined by comparison of distance data. (Wrigley, Column 1, Lines 49-53 & Column 7, Lines 46-52)

“...repeating that step for all the other subsets until all the paths have been tested for intersections against all surfaces in the scene. The method also determines, for each path, which intersection is nearest the viewing position and stores data on the co-ordinates for that intersection and on the surface of the object or zone of illumination at that intersection.” (Emphasis added, Wrigley, Abstract)

Therefore, for at least these reasons, and the similar reasons set forth above in section “Claim Rejections under 35 U.S.C. § 102”, new claims 17-39 are distinguished over Wrigley singly or in view of Lathrop and/or Buehler.

Accordingly, Applicants submit that Wrigley taken singly or in combination with Lathrop or Buehler fails to establish a *prima facie* case of obviousness for new claims 17-39 and new claims 17-39 are patentable over Wrigley taken singly, or in view of Lathrop, or in view of Buehler under 35 USC §103(a) and allowance is respectfully requested.

**CONCLUSION**

All pending claims are in a condition for allowance. Accordingly, a Notice of Allowance is respectfully requested. If the Examiner has any questions concerning the present paper, the Examiner is kindly requested to contact the undersigned at (206) 407-1561. If any fees are due in connection with filing this paper, the Commissioner is authorized to charge the Deposit Account of Schwabe, Williamson and Wyatt, P.C., No. 50-0393.

Respectfully submitted,  
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